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KAP REGARDING COVID 19 OUTBREAK AMONG GENERAL POPULATION IN PROVINCE 2 OF NEPAL

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Abstract:

Background: Corona virus disease (COVID-19) is global emergency and has badly affected society. To control COVID-19 outbreak many countries have imposed lockdown. The control of a pandemic depends upon the education level and health care system of a country. The level of knowledge, attitude and practice has important role to restrict a disease from spread. Though all province of Nepal is affected with COVID-19, the most affected is province 2.

Objective: This study aims to assess the level of knowledge, attitude and practice towards COVID-19 among general population of province 2.

Methodology: A cross section online survey was conducted. The survey consists of demographic characters and knowledge, attitude and practice questionnaires. The questionnaires were sent to 700 potential respondents. The descriptive analysis of collected data were done by using SPSS version 23. The result of this survey enlightens the importance of consistent programs of public awareness by the government and related health authorities.

Conclusion: The knowledge depends upon the literacy rate and that determines the attitude and practice of people which has direct impact over controlling pandemics. This study disclosed that good number of respondents think that COVID-19 spread via respiratory droplet, average number of respondents think that avoiding close contact and maintaining social distance can prevent from infection and low number of respondents think that lockdown can prevent spread of COVID-19. This study showed there is need to implement educational program to control infectious disease. Despite of low literacy rate (49.54%, https://moe.gov.np/assets/uploads/files/Education in Figures 2017) a good number of respondents has knowledge of covid-19.

Key words: COVID-19, General population, Nepal, Pandemics

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INTRODUCTION:

Corona virus disease (COVID-19) is highly infectious viral disease caused by Novel corona virus [1]. The first infected case of COVID-19 was detected in Wuhan, China in December, 2019. The main symptoms of COVID-19 are cough, fever and malaise and severe cases presented with acute respiratory illness or sepsis.

WHO has declared COVID-19 as pandemic on March 11, 2020. On 26th of July, 2020 COVID-19 has spread all over the world and total number of infected cases is over 16.3 million and number of deaths is 650 thousand [2].

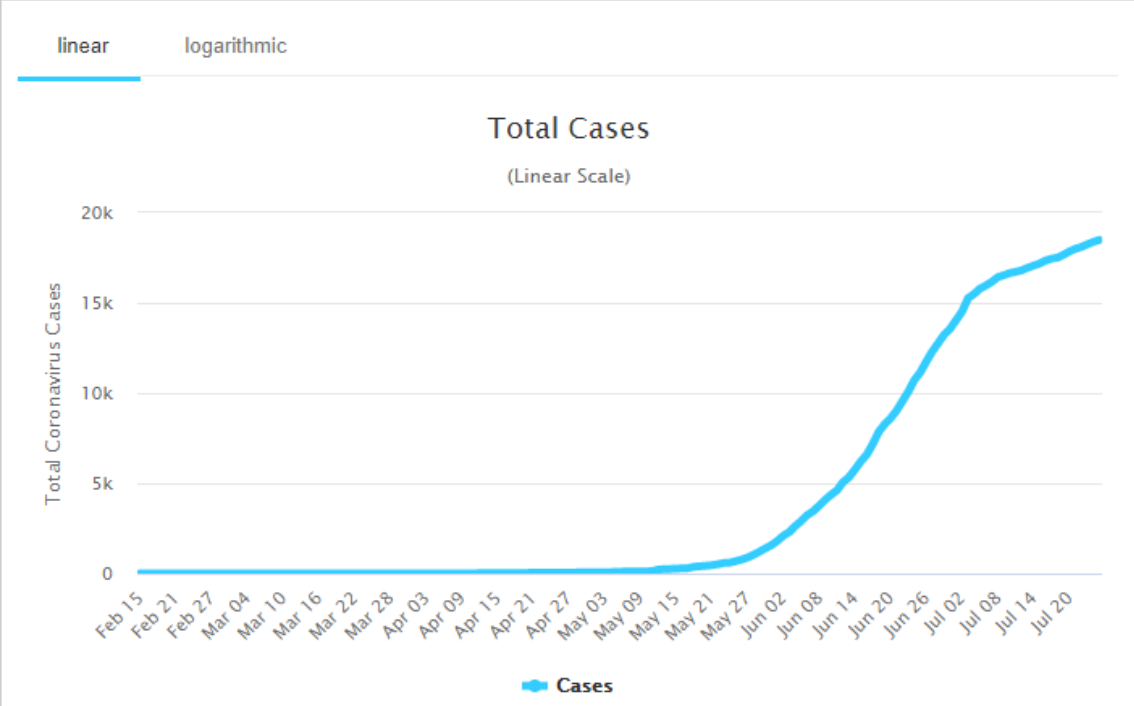
Nepal is divided in 7 provinces according to geographical diversity. Province 2 is located on southern part of Nepal and has open border with India. It is the tropical belt of Nepal where summer stays for long duration than winter and the average temperature is 30^{0}C in summer. There is open border with India on Southern part of Nepal and movement of people are not restricted across the border. Province 2 is the gateway of Nepal to India through which major imports takes place. The literacy rate of the province 2 is lowest among all other province but accommodates second largest population with highest population density.

In Nepal the first case was detected on 13 January 2020 in a Nepalese student who returned from Wuhan, China. The number remained static for around 2 months and later it increased in a double numerical value and has crossed thousands in short period of time. The first death was noted on 14 th of May.

The purpose of study is to know the basic knowledge of people of Province 2, their attitude and practice to prevent and control the spread of COVID-19 and this study will also help government to implement health awareness program to boost up the knowledge and improve the health service system.

Total corona virus cases in Nepal

Figure 1



Total corona virus cases in Nepal
Source: https://www.worldometers.info/coronavirus/country/nepal/

METHODS:

Participants

This is a cross sectional study based on online response from the participants. The participants are the general population of Province 2 of Nepal. The study is based on primary data. The necessary information has collected through the structured questionnaires and their response from the Social media and google docs. The posters contain the description on background, objective, procedure, voluntary nature of participation, declaration of anonymity, and confidentiality and notes for filling the questionnaires.

Measures

The questionnaires consist of two parts: demographic and KAP. Demography includes age, gender, occupation and level of education.

In the part of demographic information, nominal and ordinal measures were used.

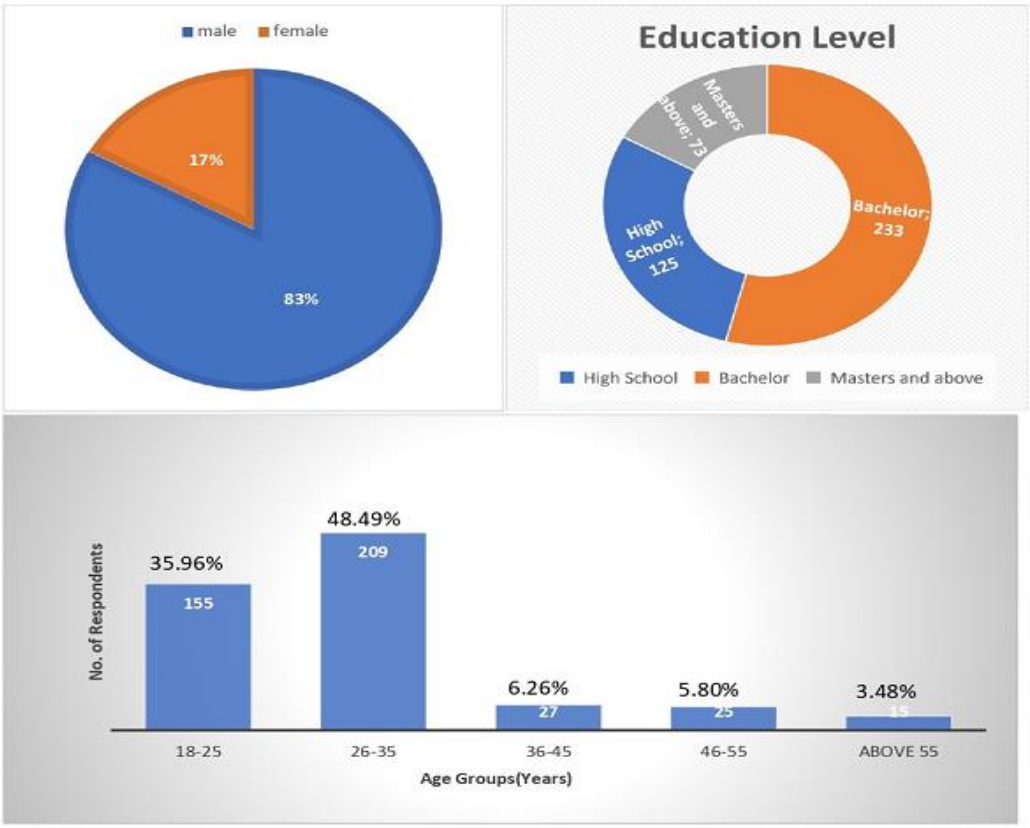
The 5 points Likert's rating scales were utilized to ask the respondents to evaluate the degree of their agreement with knowledge, attitude and practice regarding pandemic COVID – 19. The 5 points in the scale were from 1 to 5- strongly disagree, disagree, neither agree nor disagree, agree and strongly agree respectively. The data were collected from general population residing in province 2.

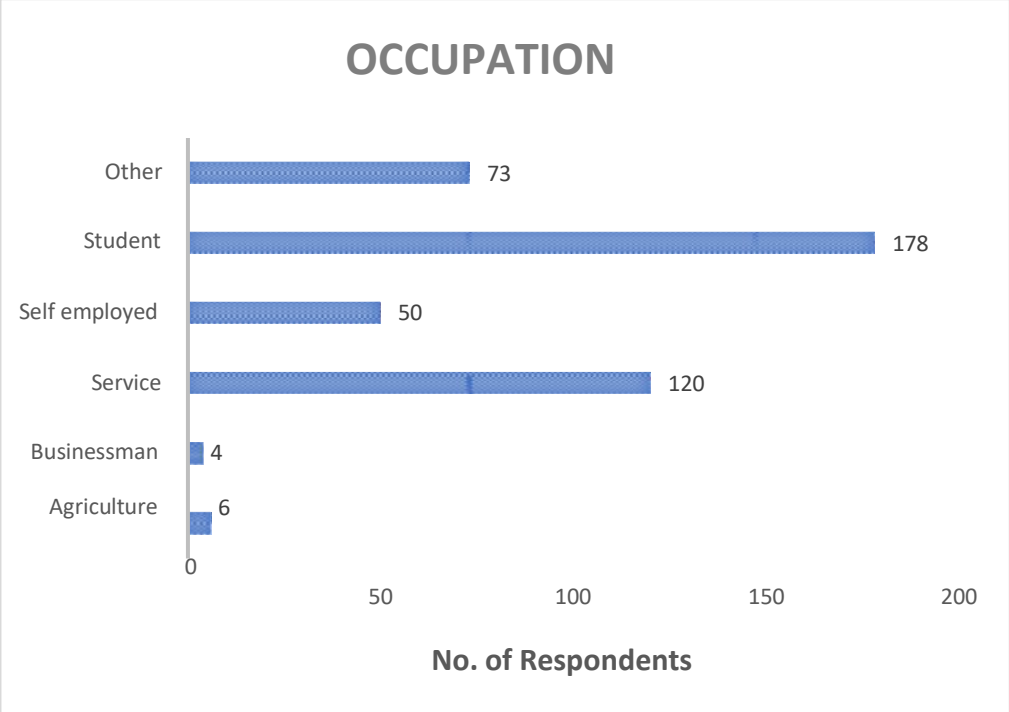
RESULTS:

Demographic Characteristics

In total sample of 431 respondents, 83 percent are male and 15.7 percent are female. The female respondents account very low to that of total sample of male which shows that the male respondents are more active compared to that of female in awaking themselves regarding the knowledge of COVID-19.

Similarly, it shows that the numbers of respondents are mainly at the ages from 26 to 35 which account for nearly 44.8 percent of total population. The second large age group is 18 to 25 that include 33.3 percent of total sample population. This figure shows that large proportion of respondents are between age group of 26 to 35 which reflects aware and mature population group are mostly interested in setting their attitude as per the knowledge gained and implementing that knowledge into practice. In addition to this, second large age group was among 18 to 25 which also acknowledge that young population group is also awaking themselves with updated knowledge and practice.





Likewise, it shows that most of the respondents who participated in survey have qualification of Bachelor and high school which accounts nearly 54 percent and 29 percent of total sample population respectively. From overall figure, it denotes that there is a majority of qualified respondents in province 2. The table depicts that the majority of the respondents from total sample population are student. Similarly, people who are involved in service also abide the correct practices regarding COVID-19. Not only the knowledge level but work experience has also affect on attitude and practice concerning COVID-19.

Knowledge factors affecting awareness level

The impact level of knowledge factors is directly proportional to the awareness level which is identified by the use of 5- point scales and their mean values.

Table 1: Assessment of Knowledge factors

Statements	Mean	Std. Deviation	Rank
Clinical symptoms are fever, dry cough and malaise	3.86	1.213	6
Can spread via respiratory droplet	4.14	1.082	1
Infection in individual because of suppressed immunity	3.97	1.055	3
Can transmit through close contact	3.97	1.215	3
Source of infection is infected country or place	3.90	1.201	4
Supportive treatment for symptoms can recover COVID	3.81	1.320	7
Proper social distancing, hand hygiene and use of mask can prevent COVID	3.88	1.271	5
Lockdown helps to prevent spread of COVID	3.58	1.037	8
Infected should be isolated in proper place	3.99	1.260	2

Table 1 presents one of the variables i.e. knowledge influence on the awareness level of the respondent in province 2. Though the symptoms of COVID-19 are not definite, among the respondent 77.7% are aware of symptoms of COVID-19. The most (87.5%) of the respondents consider COVID – 19 spread via respiratory droplet of infected individual as a major tool to make better projections of outbreak of COVID- 19 as the mean value of this variable is greatest among all mean values presented i.e. 4.14. 77.6% thinks that the infection is due to close contact with a COVID-19 affected people and 76.3% are aware that infection is more common in people with low immunity. 76.3% are aware that infection is more common in people with low immunity.

This variable makes high impact on respondents' awareness level of province 2. Similarly, while enhancing the knowledge most of the respondents' check whether the proper social distancing, hand hygiene and use of mask can prevent COVID - 19.

Here, the mean value for this variable is 3.99 which indicate that this variable also has high impact on knowledge building and awareness. People in province 2 also highly consider COVID – 19 infection is severe in individual with suppressed immunity and can be transmitted only when an individual comes in close contact with infected case and carrier.

Attitude factors affecting awareness level

Table 2: Assessment of Attitude factors

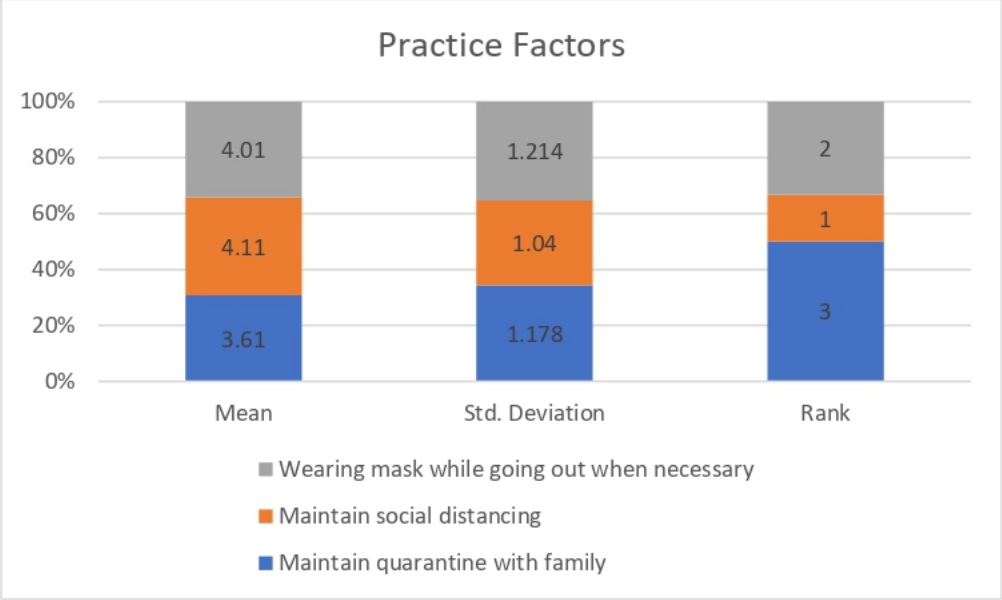
Statements	Mean	Std. Deviation	Rank
Can be controlled but it takes long time	3.67	1.177	2
Nepal will not be affected as developed country	2.11	1.040	4
Afraid of acquiring infection	3.32	1.155	3
Suspected or confirmed case should be treated in separate hospital	3.85	1.305	1

The overall attitude variables have very high impact on awareness level of province 2. The table 2 presents
which variable of attitude has high impact and also has low impact on respondents' attitude build up.

Based on the mean value, it is found out that most (78.4%) of the people prefer COVID - 19 suspected or confirmed cases should be treated in separate hospital. This variable has mean value of 3.85 which acknowledge that the outbreak of COVID-19 has shown a negative impact on social life of people as mass gathering are being avoided to reduce the transmission rate. 72.3% think that it takes long time but COVID-19 can be controlled. 72.6% disagree with the fact that Nepal will not be affected as European country. 53.9% are afraid of acquiring infection while going out.

The places where social distancing is being maintained has comparatively less number of cases.

Practice factors affecting awareness level
Assessment of Practice factors



Respondents' of province 2 also consider practice as their one of the factors for making them aware regarding COVID-19. Among all the variables included in practice factors, most (84.4%) of the people look upon maintaining social distancing. This variable has highest mean value of 4.11 which represent that there is very high influence of accessibility of the knowledge regarding spread of COVID-19 because of social gathering and hence one needs to be obliged to maintain social distancing. Similarly, maintaining quarantine (65.1%) with family also ensures the protection from spread of COVID-19. One must wear mask while stepping outside whenever required. 80% wear mask while going out.

CONCLUSION:

COVID-19 is global emergency with major effect on social factors. With the poor health system and low literacy rate the pandemic COVID-19 misinformation are spread in the society. At the time of survey, pandemic was at its peak in province 2. At this time more than 80% is knowing the disease, its route of transmission and its social impact. The analysis of knowledge, attitude and practice regarding the COVID-19 can provide reference for the prevention for further spread and recurrence of disease and help government for making policy for controlling this pandemic. The result tells that age, gender, occupation and education level should be considered while making policy for preventive health programs.

Our study demonstrated a better knowledge regarding COVID-19 among the people of province 2 and have optimistic attitude and appropriate practice correlated with knowledge to limit the spread of COVID- 19.

The KAPs in general population can help government, NGOs, and related buddies for preparing strategies and policy to tackle the emergency pandemic condition. The level of literacy and health care system have major effect in emergency public health condition.

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